

Amendment D
U.S. appl. no. 10/579,954

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REMARKS

Claims 40-58 are pending in this application.¹ Claims 4-20 and 26-35 were canceled in a previous amendment, while claims 1-3, 21-25 and 36-39 are canceled pursuant to the claim amendments set forth herein.

Claim 40 has been amended to clarify that the living polymer includes unsaturation. Support for this amendment can be at, e.g., lines 12-17 of page 4 of the specification.²

Claims 48-58 have been added. Support for new claims 48-49 can be found at the last two full paragraphs of page 4; support for new claims 50-53 and 55-58 can be found at pp. 9-12; and support for new claim 54 can be found at lines 14-17 of page 8.

The 12/1 Action rejected each of the previously pending claims under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 6,258,891 (hereinafter "US'891") in view of either of U.S. Patent Nos. 6,294,624 (hereinafter "US'624"), 5,811,479 (hereinafter "US'479"), or both. These rejections, as applied to the presently pending claims, are respectfully traversed.

Claim 40 (and all claims dependent therefrom) requires that the living polymer comprise unsaturated mer and that the initial reaction step be performed in a reaction medium that comprises an organic solvent. In reading US'891 (which equates to "Hoxmeier" in the 12/1 Action) as a whole –the appropriate standard for any obviousness rejection – it teaches the production of a block copolymer in a solventless process; see, e.g.,

- col. 1, lines 9-13 – "This invention relates to a solventless process More particularly, this invention relates to an improved process for making ... block copolymers.
- col. 1, lines 23-26 – "Thus, ... it would be advantageous to provide a process to make block copolymers ... which does not require the use of a volatile hydrocarbon solvent."
- col. 1, lines 29-31 – "The invention is a solventless process No volatile hydrocarbon solvent is used."
- col. 2, lines 51-53 – "[Omission of solvent] lowers the cost of and simplifies the polymerization process in that there is no need for costly hydrocarbon solvent removal and recycle."

¹ This results in a total of 19 pending claims, only one of which is independent. Accordingly, no additional claim fees should be due at this time.

² This and all subsequent references to the specification relate to that from the as-filed international application.

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In addition to specifically requiring the presence of a solvent in the claimed method, Applicants nowhere have claimed or even described a block copolymer or a method of making a block copolymer. The functionalized living polymer that results from the first step of the process set forth in claim 40 contains only a single unit of the cyclic compound radical; c.f., the first full paragraph of page 4 of the as-filed specification from the international application.³

The secondary references – US'624 and US'479 – have been cited for reasons that do not relate to the foregoing. No combination of these secondary references with US'891 teach or suggest the presently claimed method and, in fact, modifying US'891 so that the aforementioned specific deficiencies are corrected will result in destroying its utility (or, in the case of the solvent, its entire *raison d'être*).

For at least the foregoing reasons, Applicants submit that the presently pending claims are patentable over the references of record and in a condition for allowance.

Questions concerning this submission should be directed to the undersigned. The correspondence address of record remains unchanged.

Respectfully submitted,



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³ While many of the previously pending and newly added dependent claims include additional limitations that further distinguish them from the teachings of the cited references, special note is made of claim 54 which further fleshes out the nature of the cyclic compound radical once reacted with the living polymer terminus. The molecular weight of this radical can be compared with col. 4, lines 13-15 from US'891.